

# Early Ambulation in Obstetrics and Gynecology

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## SUMMARY

*Early ambulation has been a large factor not only in decreasing many of the complications that may follow childbirth and gynecological operations, but in reducing the time of convalescence.*

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SINCE the dawn of history, early rising after childbirth has been practiced by nearly all primitive races and by others who, through necessity or otherwise, have been unwilling to accept the teachings of the medical profession.

Owing to the greater complexities of child bearing in modern civilization, and perhaps in recognition of a decline in the ruggedness of the human body, the medical profession long accepted as routine the keeping of women in bed for various lengths of time following the delivery of a child. This was done in the conviction that it was a means of preventing serious complications and was for the future good of the individual. Medical teaching was that rising too early after parturition was liable to dire consequences such as excessive bleeding, infection, embolism, and permanent herniation through the vaginal tract.

Most physicians, however, have seen patients who, through necessity or disbelief, did not remain in bed the accepted length of time, but who got up and carried out their usual duties a day or so following childbirth; and it has been surprising to note that these patients, for the most part, convalesce normally.

Moreover, it has been noted that animals are able to resume their usual habits soon after bearing offspring, or after surgical operations, and that complications in them are rare.

Early ambulation can be defined in various ways. Ambulation, as the term is used in this presentation, means getting out of bed and moving about. Early, as defined by various individuals, is from six hours to four or five days after delivery. It should be emphasized that early ambulation distinctly does not mean early resumption of usual household duties or others requiring strenuous exercise.

For several years certain members of the medical profession have been reporting excellent results in allowing patients to walk and to carry out various exercises out of bed very soon after childbirth and

surgical operations.<sup>5</sup> During the last ten years, there have been many reports<sup>2, 4</sup> of series of cases in which early ambulation was permitted. Because of extremely crowded conditions in hospitals in recent years, physicians have been urged to send patients home early. This, together with a shortage of nursing help, has tended to encourage patients to do more for themselves and to get out of bed much earlier than was the custom.

The author's interest in this subject was aroused early in 1944 when he had occasion to observe two obstetrical services that were conducted in separate Army hospitals caring for approximately the same number of cases. The patients in one hospital were allowed to get out of bed and walk within 24 to 36 hours following delivery, while those in the other were required to remain in bed the conventional eight days and were not discharged until the tenth day.

At the end of approximately a year's time, the results of these two series were compared. All cases during this period were carefully, even skeptically, followed for any evidence of complications or poor results which might be attributable to early ambulation. It was found, however, that the women who were permitted to get out of bed early had a much shorter and less complicated convalescence and a greater sense of well-being upon leaving the hospital. A lower morbidity rate was noted among the women who had been permitted early ambulation. No cases of thrombosis were noted among them, although there were several cases among the patients who were required to remain in bed for a longer period. Perineal wounds healed as readily in patients permitted early ambulation as in those who remained longer in bed, and no greater evidence of vaginal herniations was noted.

Early in 1946, early ambulation was instituted at Seaside Memorial Hospital in Long Beach. At first the procedure was prescribed by only a few of the physicians treating obstetrical patients in the hospital, but in time others adopted it with the result that an increasing percentage of patients were permitted early ambulation. Concurrently there was a decline in maternal morbidity from 3.7 per cent in 1946 to 2 per cent in 1947. During this period there were 4,178 deliveries including cesarean sections without a maternal mortality.\* Although no doubt there were other factors contributing to these low figures, early ambulation must be given its share of the credit. There was only one known case of throm-

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\*Since this presentation was prepared, the number of deliveries without a maternal death has increased to 5,427.

bosis during this period, and it occurred in a patient who did not get out of bed until the fifth day.

The routine at Seaside Memorial Hospital has been to have the patient dangle her feet over the edge of the bed several times a day 12 hours after delivery, to have her walk around the room several times after 24 hours, and walk down the hall and have bathroom privileges after 48 hours. She is also encouraged to move about in bed as much as possible at all times. We have set 24 hours as the maximal time for remaining in bed because it has been pointed out by several authorities that thrombosis of the extremities usually occurs within two to four days following injury of the tissues and stagnation of the circulation.

By early use of the muscles, circulation is increased throughout the body, which accelerates healing and early return to normal functions of both muscles and pelvic organs. It is felt that the increase in circulation is a great factor in early involution of the uterus, which reduces the hazard of infection and hemorrhage in that organ. In addition the upright position gives better drainage of lochia from the uterus and from the vagina. Early rising encourages deeper respirations and increases circulation through the lungs, thereby decreasing chances of pulmonary complications. Perhaps the greatest reward, however, is the often stated sense of well-being on the part of the patient. All patients who have tried early ambulation are enthusiastic about it, and all who were multiparae have said the convalescence following this procedure was much more satisfactory than that following their previous pregnancies.

We have made it a rule that no patient will be required to conform to the previously mentioned time schedule for early ambulation, but we do require that patients who do not get out of bed within the first 48 hours must remain in bed the allotted eight days before they are permitted to walk. This is done to prevent liberation of emboli from thrombi formed early in the postpartum period, and to permit recognition of the signs and symptoms of a thrombus, which usually occur four to eight days postpartum.<sup>1, 3</sup>

Results of early ambulation in gynecology are almost parallel to those in obstetrics. For years, many surgeons have advocated leg exercises after all kinds of operations. In the past few years, surgeons have been encouraging patients to walk within a few hours after major surgical procedures. In this regard it is appropriate to remind ourselves of the results which have been obtained in operations on animals, with no effort made to keep the animals quiet afterward. Also, we have known for years that convalescence after operations on young children was shorter and less complicated than the convalescence of adults. Undoubtedly contributing is the fact that children cannot be kept quiet in bed after operations and have therefore, in effect, practiced early ambulation in bed.

On our service, patients who have been operated upon are permitted to follow the same routine as obstetrical patients. Here again patients who have undergone repeated cesarean sections offer the information that convalescence is more satisfactory with early ambulation. Because of the prejudices built up over a long period, it is sometimes hard to convince patients that it would be to their best interest to exercise while in bed, and to get out of bed early. But in my experience all patients agreed, after the first one or two attempts at getting out of bed, that they felt much better than they expected to and were glad they had made the effort.

Increase in circulation of the extremities, in the abdominal wall, and in the abdominal and pelvic contents, has been a large factor in preventing a great many of the common complications and discomforts following operations. Gas pains, distention, nausea, and vomiting, have practically become something of the past. It has been stated on several occasions that early movement of the abdominal contents helps prevent adhesions and that increasing the circulation is a factor in the healing of injured tissues and in the quicker healing of abdominal wounds.

We have noted a marked reduction in the amount of sedation needed for patients who are allowed early rising. Strong sedation is rarely needed after the first 24 hours; this, we feel, is a great factor in the prevention of ileus.

Contraindications to early ambulation are few, and some which were formerly considered valid have been discarded. We feel that a patient with a temperature of 101° F. or over should not be allowed out of bed, at least not until the cause is known. Some physicians, however, believe that this is not a reason to keep patients from early ambulation; on the contrary, that walking may help reduce the fever. Hemorrhage, although rare, is certainly a reason for keeping the patient quiet.

There is a great deal of difference of opinion as to whether patients who have undergone surgical repair, either at the time of childbirth or as a separate operation, should be encouraged in ambulation. It is reasonable to believe that in some instances early ambulation might cause sufficient increase in abdominal force to break down a repair of herniation through the vagina.

The fact that the patient feels so well in a few days following delivery or operation leads to the question, "Why can't I go home?" Many patients wish to leave the hospital the second or third day following delivery, and even three or four days following major operations. And while patients who have been permitted early ambulation can safely leave the hospital several days earlier than they might otherwise, complications such as thrombosis, infections and wound separations still do occur in such patients, and for that reason they should remain under observation until these dangers are past. Moreover, patients must be warned repeatedly against too vigorous exercises and against doing too

much until the body has had time to recover and wounds are safely healed.\*

419 Professional Building.

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*Discussion by* ROBERT D. DUNN, M.D., *Palo Alto*

Doctor Pillsbury has presented a paper on an extremely important subject.

The subject with which Dr. Pillsbury has dealt is important not only because of the shortness of hospital beds

\*As to the legality of early ambulation, Louis J. Regan, M.D., LL.B., legal counsel for the Los Angeles County Medical Association, has advised that in general the concept is that if the procedure is advisable medically it is defensible legally. This aspect is mentioned because the author has been informed that several actions are pending for recovery for damages alleged to have occurred as a result of a patient's having been allowed to leave the hospital too early.

but also because of the implication of possible reduction of complications in postpartum patients. In anticipation of this discussion, I reviewed a thousand consecutive obstetrical cases from my private records of 1947 and a similar number from 1941 and 1942. These are not exactly comparable, as in the earlier group relief of pain was obtained by analgesia and in the recent group caudal anesthesia was used in most cases. In the early group there was a morbidity of 1.8 per cent. In one-third of these cases morbidity was due to endometritis, or intra-uterine infection. In the more recent series there was a morbidity of 1.2 per cent—not a significant difference in the morbidity, but significant, I think, in that there was only one endometritis. Most of the morbid conditions were due to breast infection, which I think is not influenced by early ambulation. Unfortunately from the standpoint of comparative data, there were no cases of embolism in either group.

I think we may definitely say that early ambulation in obstetrics lowers the incidence of postpartum intra-uterine infection.

The well-being of the patient is extremely important in this type of postpartum care, but there is one disadvantage which I would like to emphasize. When the patient is allowed to go home early, often the family considers the patient perfectly well and the time of convalescence finished, so that some patients immediately pick up their household duties and over-do. Thus, they become completely tired out and it takes them some time to recover.

